

IN THE CLAIMS

1. (currently amended) An RF coil apparatus comprising:

a plurality of coil elements connected in parallel; and

an adjusting device for ~~adjusting~~adjusting, based on a pre-determined field of view, electric current ratios among said plurality of coil elements.
2. (currently amended) The RF coil apparatus of claim 1, wherein

said adjusting device adjusts the electric current ratios by adjusting the ~~admittances~~admittances of said plurality of coil elements.
3. (currently amended) The RF coil apparatus of claim 2, wherein

said adjusting device adjusts the admittances by adjusting the ~~electrostatic~~electrostatic capacitances of said plurality of coil elements.
4. (currently amended) ~~The RF~~An RF coil apparatus ~~of claim 1,~~
wherein comprising:

a plurality of coil elements connected in parallel; and

an adjusting device for adjusting electric current ratios among said plurality of
coil elements, said adjusting device adjusts the electric current ratios among said
plurality of coil elements while keeping the ~~overall~~an overall electrostatic capacitance
of the parallel circuit of said plurality of coil elements at a constant level.
5. (currently amended) ~~The RF~~An RF coil apparatus ~~of claim 1,~~
wherein comprising:

a plurality of coil elements connected in parallel; and

an adjusting device for adjusting electric current ratios among said plurality of
coil elements, said adjusting device stores the electric current ratios among said
plurality of coil elements corresponding to an FOV.

6. (currently amended) ~~The RF~~An RF coil apparatus ~~of claim 1,~~
~~wherein~~comprising:

a plurality of coil elements connected in parallel; and

an adjusting device for adjusting electric current ratios among said plurality of
coil elements, said adjusting device also adjusts ~~the overall~~an overall electrostatic
capacitance of the parallel circuit of said plurality of coil elements.

7. (original) The RF coil apparatus of claim 6, wherein

said adjusting device stores the electric current ratios and circuit constants of
said plurality of coil elements corresponding to an FOV.

8. (currently amended) ~~The RF~~An RF coil apparatus ~~of claim 1,~~
~~wherein~~comprising:

a plurality of coil elements connected in parallel, said plurality of coil
elements have a common coil axis, and are arranged at intervals on said ~~coil axis.~~coil
axis; and

an adjusting device for adjusting electric current ratios among said plurality of
coil elements.

9. (currently amended) A magnetic resonance imaging apparatus for
collecting magnetic resonance signals while applying a static magnetic field, a
gradient magnetic field and an RF magnetic field to a subject to be imaged, and
producing an image based on the magnetic resonance signals, said apparatus
comprising:

an RF coil apparatus for conducting at least one of the application of said RF
magnetic field and reception of said magnetic resonance signals, said RF coil
apparatus comprising:

a plurality of coil elements connected in parallel; and

an adjusting device for ~~adjusting~~adjusting, based on a pre-determined
field of view, electric current ratios among said plurality of coil elements.

10. (currently amended) The magnetic resonance imaging apparatus of claim 9, wherein

said adjusting device adjusts the electric current ratios by adjusting ~~the admittances~~admittances of said plurality of coil elements.

11. (currently amended) The magnetic resonance imaging apparatus of claim 10, wherein

said adjusting device adjusts the admittances by adjusting ~~the electrostatic~~electrostatic capacitances of said plurality of coil elements.

12. (currently amended) ~~The magnetic~~A magnetic resonance imaging apparatus ~~of claim 9, wherein~~for collecting magnetic resonance signals while applying a static magnetic field, a gradient magnetic field and an RF magnetic field to a subject to be imaged, and producing an image based on the magnetic resonance signals, said apparatus comprising:

an RF coil apparatus for conducting at least one of the application of said RF magnetic field and reception of said magnetic resonance signals, said RF coil apparatus comprising:

a plurality of coil elements connected in parallel; and

an adjusting device for adjusting electric current ratios among said plurality of coil elements, said adjusting device adjusts the electric current ratios among said plurality of coil elements while ~~keeping the~~keeping an overall electrostatic capacitance of the parallel circuit of said plurality of coil elements at a constant level.

13. (currently amended) ~~The magnetic~~A magnetic resonance imaging apparatus ~~of claim 9, wherein~~for collecting magnetic resonance signals while applying a static magnetic field, a gradient magnetic field and an RF magnetic field to a subject to be imaged, and producing an image based on the magnetic resonance signals, said apparatus comprising:

an RF coil apparatus for conducting at least one of the application of said RF magnetic field and reception of said magnetic resonance signals, said RF coil apparatus comprising:

a plurality of coil elements connected in parallel; and

an adjusting device for adjusting electric current ratios among said plurality of coil elements, said adjusting device stores the electric current ratios among said plurality of coil elements corresponding to an FOV.

14. (currently amended) ~~The magnetic~~ A magnetic resonance imaging apparatus of claim 9, wherein for collecting magnetic resonance signals while applying a static magnetic field, a gradient magnetic field and an RF magnetic field to a subject to be imaged, and producing an image based on the magnetic resonance signals, said apparatus comprising:

an RF coil apparatus for conducting at least one of the application of said RF magnetic field and reception of said magnetic resonance signals, said RF coil apparatus comprising:

a plurality of coil elements connected in parallel; and

an adjusting device for adjusting electric current ratios among said plurality of coil elements, said adjusting device also adjusts ~~the overall~~ an overall electrostatic capacitance of the parallel circuit of said plurality of coil elements.

15. (original) The magnetic resonance imaging apparatus of claim 14, wherein

said adjusting device stores the electric current ratios and circuit constants of said plurality of coil elements corresponding to an FOV.

16. (currently amended) ~~The magnetic~~ A magnetic resonance imaging apparatus of claim 9, wherein for collecting magnetic resonance signals while applying a static magnetic field, a gradient magnetic field and an RF magnetic field to a subject to be imaged, and producing an image based on the magnetic resonance signals, said apparatus comprising:

an RF coil apparatus for conducting at least one of the application of said RF magnetic field and reception of said magnetic resonance signals, said RF coil apparatus comprising:

a plurality of coil elements connected in parallel; and

an adjusting device for adjusting electric current ratios among said plurality of coil elements, said plurality of coil elements have a common coil axis, and are arranged at intervals on said coil axis.